



**The Commonwealth of Massachusetts**  
**DEPARTMENT OF**  
**TELECOMMUNICATIONS AND ENERGY**

D.T.E. 03-71

February 24, 2004

Petition of Western Massachusetts Electric Company for approval by the Department of Telecommunications and Energy of a reclassification of its transmission and distribution facilities.

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**APPEARANCES:**

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FOR: WESTERN MASSACHUSETTS ELECTRIC  
COMPANY  
Petitioner

## I. INTRODUCTION

On May 16, 2003, Western Massachusetts Electric Company ("WMECo" or "Company") filed with the Department of Telecommunications and Energy ("Department") a request for approval of the Company's reclassification of certain transmission and distribution facilities. The Company's proposal represents a change in the classification of WMECo's transmission and distribution facilities as approved by the Department in Classification of Transmission and Distribution Facilities, D.P.U./D.T.E. 97-93 (1988), which resulted from the directives of the Federal Energy Regulatory Commission ("FERC") that electric companies must provide transmission service on an open-access, non-discriminatory basis.<sup>1,2</sup>

The Department docketed this matter as D.T.E. 03-71. On July 22, 2003, the Department issued a Notice of Filing and Request for Comments. On August 15, 2003, the Western Massachusetts Industrial Customers Group ("WMICG") filed written comments. In its comments, WMICG raised the following issues: (i) additional information is needed on the current and future rate impact of the Company's reclassification proposal and (ii) in reviewing the Company's proposal, the Department should consider the impact on interconnection

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<sup>1</sup> Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, F.E.R.C. Stats. & Regs. ¶ 31,036 (1996) ("Order 888").

<sup>2</sup> The classification of transmission and distribution facilities not only is part of FERC's initiative under Order 888, but part of the Department's directive that electric distribution companies provide unbundled electric service (*i.e.*, generation, transmission, and distribution). Electric Industry Restructuring Plan: Model Rules and Legislative Proposal, D.P.U. 96-100, App. I at 2 (1996); G.L. c. 164, § 1A(a).

standards for customers (WMICG Comments at 1-2). Also in this proceeding, WMECo responded to fourteen information requests issued by the Department.<sup>3</sup>

## II. DESCRIPTION OF THE COMPANY'S PROPOSAL

\_\_\_\_\_The Company states that its proposal is designed to refine the demarcation between transmission and distribution electrical equipment in its substations to better represent the way that WMECo's electrical system is planned, designed, operated, and maintained (Filing Letter at 1). The Company also states that its proposed line of demarcation is consistent with that applied by its affiliate electric companies within the Northeast Utilities system: Connecticut Light and Power Company and Public Service Company of New Hampshire. WMECo's proposed demarcation is based on the following classification criteria:

- Classify all equipment operating at 69 kilovolts ("KV") or above as transmission.
- Classify all equipment operating below 69 KV as distribution.
- Classify step-down transformers that reduce voltage from transmission voltages to distribution voltages as distribution (this includes the high-voltage switch that connects the transformers to the transmission system).
- Classify all protective relays and controls with the system that they protect or control as distribution.
- Classify all shared facilities, assets that support transmission and distribution, as distribution. Shared facilities include: control houses, lighting, fences, security systems, grounding mats, batteries, station service transformers, etc.
- Classify all land associated with transmission facilities as transmission.

(id., Att. A at 1).

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<sup>3</sup> Consistent with 220 C.M.R. § 1.10, the Department hereby enters into the record as evidence WMECo's responses to the Department's information requests. The exhibits are numbered corresponding to the numbers for the information requests.

WMECo indicates that its proposal refines the classification of substation equipment in accordance with its primary function (i.e., whether it serves a transmission or distribution function) (Filing Letter at 2). Under the Company's proposal, all facilities, including step-down transformers, that are used to support the technical and functional capabilities on WMECo's systems at less than 34.5 KV would be classified as local distribution (id.).

WMECo reasons that the line of demarcation between transmission and distribution at all step-down substations occurs at the point of interconnection between the bulk power electrical network and the facilities serving local loads (id.). WMECo states that its proposed modification to the classification of substation equipment is consistent with FERC's seven factor test because it categorizes equipment in a substation by function rather than by how the substation is connected into the transmission grid (Exh. DTE-1-14, Supp. at 1).

WMECo states that its current methodology, as approved by the Department in D.P.U./D.T.E. 97-93, classifies substation electrical equipment as follows:

- a. All equipment in substations with the following characteristics is classified as transmission:
  1. high-side voltage of 69 KV or above and connection to three or more transmission lines; and
  2. high-side voltage of 69 KV or above and has generation feeding into the transmission system.
- b. All equipment in all other substations is classified as distribution (id.).

WMECo indicates that much of its substation equipment is not currently classified in accordance with the function of the equipment, thereby creating inconsistencies. For example, the 115 KV/13.8 KV power transformer at the Agawam Substation is classified as transmission,

while the similar transformer that serves the same purpose at the Southwick Substation is classified as distribution. Similarly, the 115 KV circuit breakers at the Doreen Substation in Pittsfield are classified as transmission, while the similar circuit breaker that serves the same purpose at the Oswald Substation in Pittsfield is classified as distribution (id.).

As proposed, WMECo would classify the following as transmission equipment: auto transformers (345 KV/115KV); circuit breakers (345 KV, 115 KV, and 69 KV); and electrical buses and switches (345 KV, 115, KV, and 69 KV) (id.). WMECo proposes to classify as distribution equipment: power transformers (115KV/23KV and 115KV/13.8KV); circuit breakers (23KV and below); capacitor banks (23KV and below); electrical buses and switches (23 KV and below); and switchgear (23 KV and below) (id. at 2). At twelve substations, there would be a reclassification of transmission facilities to distribution facilities (id. at 3; Filing Letter, Att. at 3). At twenty substations, there would be a reclassification of distribution facilities to transmission facilities (id. at 4; Filing Letter, Att. A at 2).

WMECo shows that its proposed changes would increase the net book value balance of its distribution plant balance by approximately six million dollars, as compared to the plant balance under the currently approved transmission and distribution demarcation (the net transmission plant balance would decrease by the same amount) (Filing Letter at 2; see also, Exhs. DTE-1-1; DTE-1-2). Regarding a possible rate change as a result of the proposed reclassification, the Company states that its transmission revenue requirement would decrease by approximately \$900,000 (Exh. DTE-1-5, Supp No. 2). The Company also states that WMECo's distribution revenue requirement would increase by an estimated \$1,200,000 as a

result of the reclassification of assets from transmission to distribution plant (id.). The Company states that when it files for a general rate increase, the \$1,200,000 would be included in the calculation of WMECo's rates (id.).

Regarding the issue of generator interconnection, WMECo states that its proposed reclassification would not affect any pending interconnection requests (Exh. DTE-1-8). WMECo indicates that there are no proposed interconnections of generators at any of the facilities proposed for reclassification (Exh. DTE-1-9).

### III. STANDARD OF REVIEW

In determining the appropriate classification of transmission and distribution facilities for an electric company, the Department will review the classification on a company-specific basis based on the test established by FERC in Order 888. D.P.U./D.T.E. 97-93, at 3. FERC's test consists of seven indicators as follows: (1) local distribution facilities are normally in close proximity to retail customers; (2) local distribution facilities are primarily radial in character; (3) power flows into local distribution systems; it rarely, if ever, flows out; (4) when power enters a local distribution system, it is not reconsigned or transported on to some other market; (5) power entering a local distribution system is consumed in a comparatively restricted geographical area; (6) meters are based at the transmission/local distribution interface to measure flows into the local distribution system; and (7) local distribution systems will be of reduced voltage. Id. at 3-4, citing Order 888, at 31,770-31,771. The Department will apply the FERC test in a flexible manner taking into account the function of the equipment involved

and, where appropriate, supplementary facts and historical-use factors that extend beyond the seven indicators. Id. at 4-5.

### III. ANALYSIS AND FINDINGS

The Department has reviewed WMECo's revised criteria for classifying transmission and distribution facilities, criteria that are based on how the Company's electrical system is planned, designed, operated, and maintained. The Department has evaluated WMECo's reclassification of its transmission and distribution facilities in terms of the FERC test, giving consideration to the function of the facilities. Because of the classification inconsistencies noted under WMECo's current classification methodology, the Department will not apply historical-use factors in this case.

In reclassifying equipment within its substations, WMECo has set the line of demarcation between transmission and distribution at the point of interconnection between the bulk power electrical network and facilities that serve local electric loads (Filing Letter at 2). The Department agrees with the Company that auto transformers that change voltage from 345 KV to 115 KV; circuit breakers operating on the 345 KV, 115 KV, and 69 KV systems; and electrical buses and switches operating on the 345 KV, 115 KV, and 69 KV systems should be classified as transmission facilities based on our application of the FERC indicators, because those facilities do not meet the characteristics of distribution facilities. Specifically, this equipment is part of the Company's high voltage system within the New England interconnected transmission system, which is not all in proximity to retail customers (id. at 2). Moreover, this

equipment serves a system that is a network and loop system and not primarily radial<sup>4</sup> in character (id.). As part of the interconnected system, (i) power can flow into and out of this equipment, (ii) the equipment supports the transport of power to other markets, and (iii) the equipment supports the transfer of power over a large geographical area (id.). Also, the equipment operates at high voltage, not at reduced voltage (id.). Therefore, the Department finds that this equipment is appropriately classified as transmission.

The major types of equipment in substations to be classified as distribution are: power transformers (i.e., change voltage from 115 KV to 23 KV and from 115 KV to 13.8 KV); circuit breakers (operating at 23 KV and below); capacitor banks (operating at 23 KV and below); electrical buses and switches (operating at 23 KV and below); and switchgear (operating at 23 KV and below) (id.). The Department's application of the FERC indicators shows that this equipment should be classified as distribution, because of the functions that this equipment serves. This equipment operates on systems that are radial in configuration, that deliver power to geographically restricted areas, and that are in close proximity to retail customers (id.). Power flows into this equipment and rarely flows out, and this equipment rarely transports power to other markets (id.). Also, this equipment operates at reduced voltage (id.). Therefore, the Department finds that this equipment is appropriately classified as distribution.

The Department notes that the estimated rate effect of WMECo's reclassification appears to appropriately reflect the change in asset balances (Exh. DTE-1-5, Supp. No. 2). Also, this

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<sup>4</sup> A radial system has only one supply path for power, as opposed to network and loop systems that have at least two paths, which are typical of transmission systems.



reclassification appears to have no adverse effect on electric generator interconnections (Exhs. DTE-1-8; DTE-1-9).

The Department's determination in this Order is not in any way to be construed as a ruling relative to the appropriate ratemaking treatment to be accorded any costs associated with the classification of transmission and distribution facilities. Furthermore, the Department reserves the right to investigate the Company's classification of facilities in the future and to reach a different conclusion as may be warranted by changed circumstances.

#### IV. FILING REQUIREMENTS

WMECo's proposal is the first request for approval of a reclassification of transmission and distribution facilities since the Department approved the classifications for all Massachusetts electric companies in 1998. Classification of Transmission and Distribution Facilities, D.P.U./D.T.E. 97-93 (1988). In order to provide for an appropriate review of future reclassification requests, the Department requires the inclusion of the following information in any such filing:

- a. describe the facilities, including the type, the numbers of each type, the location, and the functional use;
- b. explain the reason(s) for the reclassification and the methodology applied in performing the reclassification;
- c. identify any change in transmission or distribution service that would result from the proposed reclassification;
- d. explain how the proposed reclassification of each type of facility satisfies FERC's seven-indicator test;
- e. provide the aggregate dollar amount of the transmission assets and distribution assets that are proposed for reclassification;

- f. provide the transmission and distribution book balances before and after the proposed reclassification for (i) book amount, (ii) accumulated depreciation, and (iii) net book value; and
- g. identify the changes in rates for transmission service and distribution service that would be attributable to the proposed reclassification.

IV. ORDER

After due notice and consideration, it is

ORDERED: That Western Massachusetts Electric Company's classification of distribution facilities is approved.

By Order of the Department,

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Paul G. Afonso, Chairman

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James Connelly, Commissioner

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W. Robert Keating, Commissioner

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Eugene J. Sullivan, Jr., Commissioner

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Deirdre K. Manning, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).